

Service Manual MINI COMPONENT SYSTEM

Model: AMI-316L/316R AMI-317L/317R

DAEWOO ELECTRONICS CO., LTD OVERSEAS SERVICE DEPT.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



CAUTION RISK OF ELECTRIC SHOCKS DO NOT OPEN



CAUTION:

TO REDUCE THE RISK IF ELECTRIC SHOCK, DO NOT REMOVE COVER(OR BACK).

NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULTED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPAN-YING THE APPLIANCE.

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

LASER SAFETY

THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

CAUTION: USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES. INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the appliance and in the operating instructions should be adhered to.
- All operating and use instructions should be followed.
 - 1. Water and Moisture The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
 - 2. Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.

CART WARNING



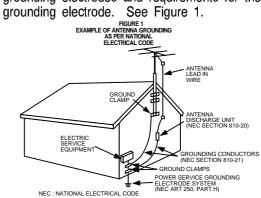
FIGURE 2

PORTABLE 3. An appliance and cart combination should be moved with care.

Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

- 5. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 6. Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 7. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 8. Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
- 9. Power Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 10. Protective Attachment Plug The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
- 11. Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- 12. Power Lines An outdoor antenna should be located away from power lines.
- 13. Outdoor Antenna Grounding If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to and antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the



- 14. Non-use Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 15. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 16. Damage Requiring Service The appliance should be serviced by qualified service personnel when:
 - a) The power-supply cord or the plug has been damaged; or
 - b) Objects have fallen, or liquid has been spilled into the appliance; or

- c) The appliance has been exposed to rain; or
- d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- e) The appliance has been dropped, or the enclosure damaged.
- 17. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

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◆CD • AMI-316L/316R/317L/317R	►CONTROL • AMI-316L/316R • AMI-317L/317R
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1. ADJUSTMENTS

◆ TUNER SECTION

TEST EQUIPMENT

- 1. Signal Generator with a frequency range of FM broadcast.
- 2. Oscilloscope with a side amplifier of approximately 100 KHz.
- 3. FM $75/50\Omega$ dummy antenna.
- 4. VTVM

FM RF SSG FM Antenna Terminal(75 ohm) 75 ohm Coaxal Carrier Frequency : 98MHz Output Level : 26dBuV Modulation:Audio 1kHZ, 75kHz Deviation

FM ALIGNMENT

- 1. Turn on the FM signal generator and the VTVM allowing a 15 minutes warm-up period.
- 2. Connect the VTVM across the headphone jack or speaker terminal.
- 3. Set signal generator frequency as listed in ALIGNMENT CHART and maintain a sufficient output level to provide an indication on VTVM.

NOTE

- 1. Use a screwdriver with plastic or ceramic grip for all adjustments.
- 2. Standard test frequency 1 KHz and deviation 75 KHz for FM.

FM RF. IF ALIGNMENT CHART

Step	Item	Input Circuit Setup	Output Circuit Setup	Tuner Setting	Adjust Point	Adjustment
1	FM IF Adjustment	Connect stereo signal generator to FM ANT terminal(J001)	Connect DC voltmeter to edge R201	FM 98MHz 75KHz Dev. 26dB μ	L203	Adjust for DC 0V±0.1V
2.	Auto Stop Sensitivity	Connect stereo signal generator to FM ANT terminal(J001)	Connect DC voltmeter to edge of RV201	FM 98MHz 75KHz Dev. 26dB μ	RV201	Adjust for DC 1.17V±0.02V Confirm stereo indicator is lighted and L/R channel is separated.

Unless other specified set being switched FM mode, adjust generator's frequency to center of the FM band where no FM broadcast exists

Otherwise adjustment of FM usable sensitivity, frequency range for FM band are not needed, but confirm these data are satisfied with specification.

CAUTION: When realizing the FM receiving frequency the highest end of the frequency range should not be more than 108 MHz and the lowest end of the frequency range should not be less then 87.5 MHz, in order to comply with FTZ regulation in West Germany.

♦ CD SECTION

Note: 1. Use the oscilloscope with more than $10M\Omega$ impedance.

2. Clean an object lens by an applicator with natural detergent when the signal level is low than specified value with the following checks.

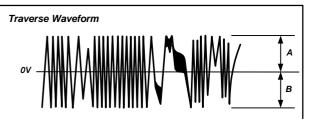
RF LEVEL CHECK

- Connect oscilloscope to test point TP502 and IC502 Pin66 on CD PCB.
- 2. Press power switch on.
- 3. Put test disc(TCD-781) in and press play button then pause button.
- 4. Confirm that oscilloscope waveform is clear.
 Clear RF signal waveform means that the shape""can be clearly distinguished at the center of waveform.
- 5. Adjust RV501 to get a clear waveform and maximum amplitude

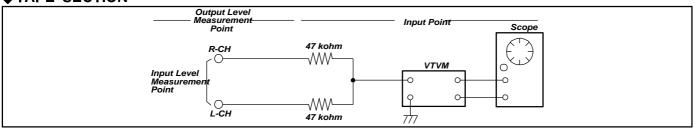
RF Signal Waveform VOLT/DIV: 200mV TIME/DIV: 50ns Level: 1.2±0.3Vp-p

E-F BALANCE ADJUSTMENT

- 1. Connect oscilloscope to test point TP502 and TP503 on CD PCB.
- 2. Press power switch on.
- 3. Put test disc(TCD-781) in and press play button then pause button.
- 4. Pressing Fast Forward button, adjust RV502 to get that the oscilloscope waveform is symmetrical on the bottom in relation to 0V, and check this level.
- * Design and specifications may be subject to change without notice.



◆TAPE SECTION



Test Tape be used

Tape	Contents	Use					
MTT-111N	3 KHz	Tape Speed Adjustment					
MTT-114N	10 KHz	Head Azimuth Adjustment					
MTT-5511	Blank	Record Frequency Property					

HEAD ADJUSTMENT (AZIMUTH)

- 1. 10KHz test tape(example: MTT-114N) must be used for this adjustment.
 2. Connect to VTVM or oscilloscope to the headphone jack or speaker terminal.
- 3. Press the play button.
- 4. Adjust the azimuth by using a screw driver to maintain the max. L&R output voltage.
- 5. Adjust tape A(1), tape B(2) respectively, Please secure the azimuth position by using locking paint.

◆ RECORDING BIAS OSCILLATOR FREQUENCY ADJUSTMENT

- Connect the frequency counter to TP603, GND.
 Press the REC button.
- 3. Adjust L603 to obtain 80 KHz \pm 100Hz

	TAPE ALIGNMENT CHART									
Step	Step Item		Reference Value	Test Tape	Adjust Point	Test Point	Note	FIG.		
			3,015~3,025Hz	MTT-111N		L/R Channel	Confirm Wow & Flutter is within 0.35%	FIG.1		
1	Tape Speed Adjustment	Normal	3,000~3,010Hz	MTT-111N	RV601	Line Out L/R Channel	Confirm Tape Speed of end position after adjustment at tape start position	FIG.1		
		High 5,820~6,180Hz MTT-111N			Shorted TP601, TP602	Confirm High speed after normal speed adjustment	FIG.1			
2	Azimuth Adj	ustment	Maximum Level Phase:Within90°	MTT-114N	Head Screw	Line Out L/R Channel		FIG.2,3,4		
3	Recording Bias 3 Oscillator Frequency Adjustment			MTT-5511	L603	TP603,	Adjust with frequency counter connected.	FIG.1		

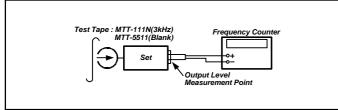
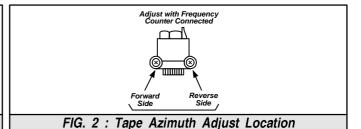


FIG. 1: Tape Speed & Record Bias Oscillator Frequency Adjust Circuit



(Record/Playback Head)

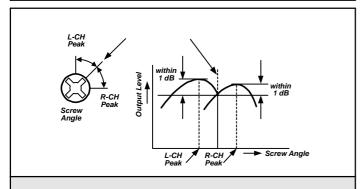


FIG. 3: Tape Azimuth Adjust Head Screw & Waveform

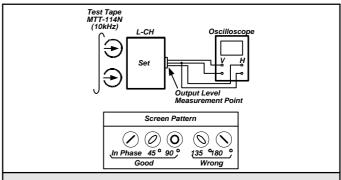
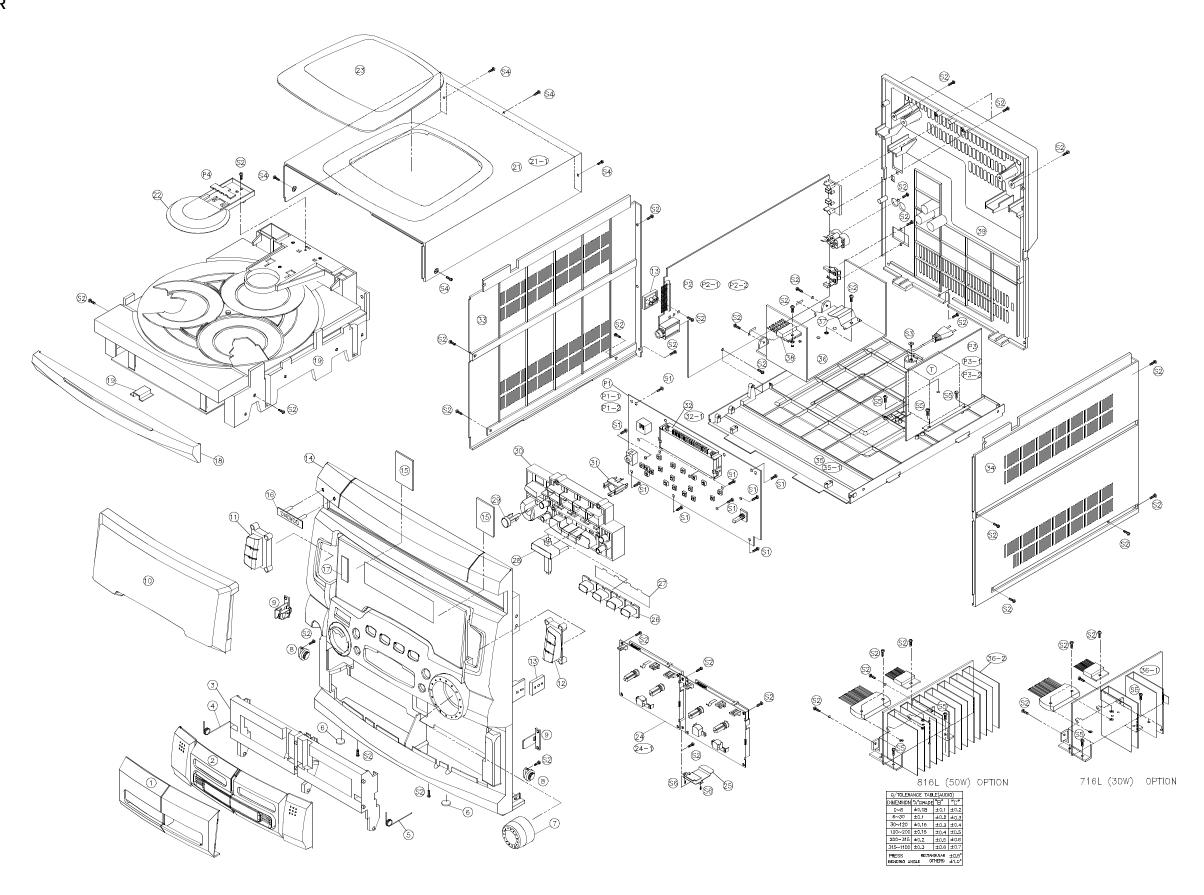


FIG. 4: Tape Azimuth Adjust Circuit & Waveform

2. EXPLODED VIEW AND MECHANICAL PARTS LIST

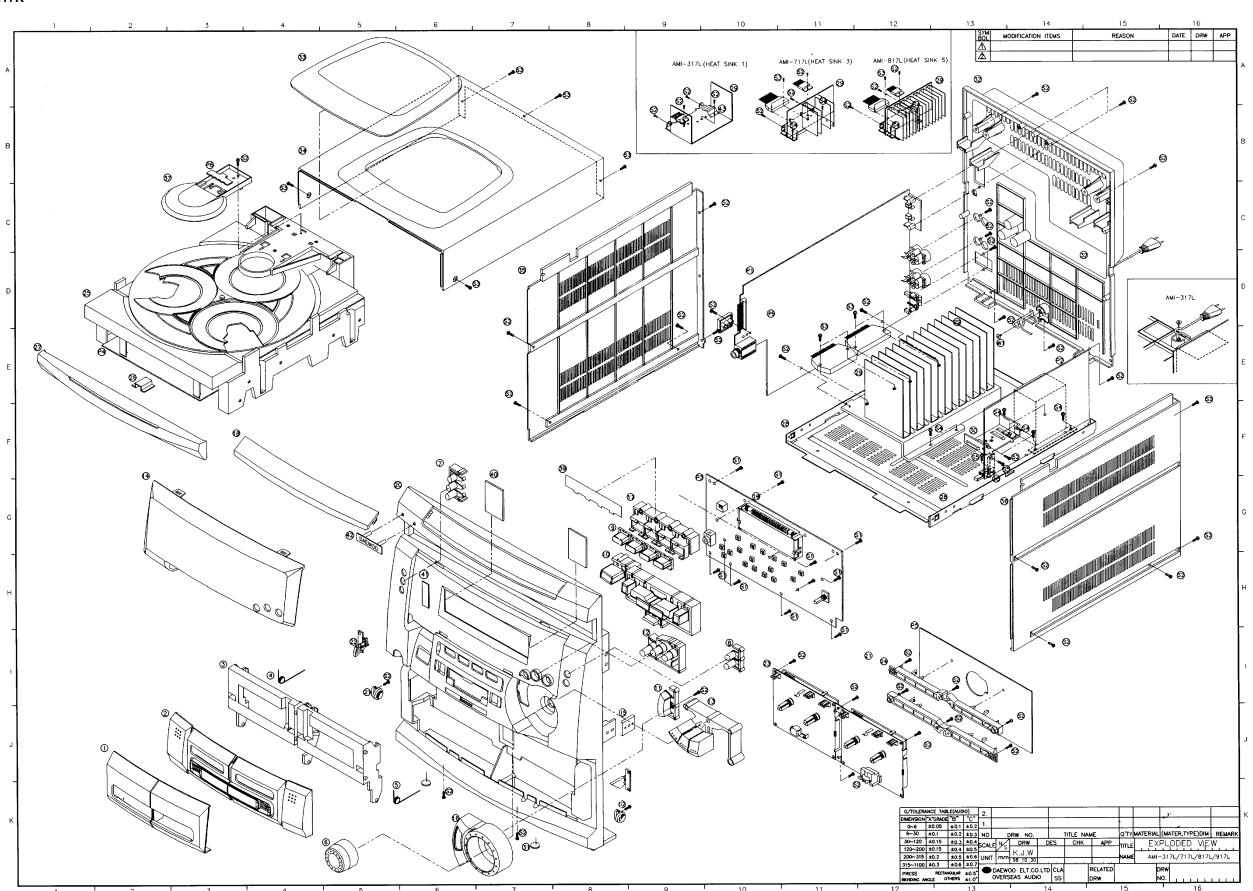
◆ AMI - 316L / 316R



♦AMI-316L/316R PART LIST

No.	Parts Name	Parts Code	Description	Q'ty
	WINDOW DOOR A	9CD1613900	ACRYL	1
1	WINDOW DOOR B	9CD1614000	ACRYL	1
2	COVER DOOR A	9CD0410200	MIPS	1
	COVER DOOR B	9CD0410300	MIPS	1
3	DOOR FRAME A/B	9CD1809400	MIPS	1
-	DOOR FRAME A/B	9CD1809500	MIPS	11
4	SPRING DOOR EJECT L	9CD30078L0	STS	1
5	SPRING DOOR EJECT R	9CD30078R0	STS	1
<u>6</u>	CUSHION FOOT	9CD4207700	URETHAN FOAM RUBBER	2
7	KNOB VOLUME	9CD1334400	ABS	1
<u>8</u> 9	DAMPER ASSY LOCKER ASSY	9CDM029800		2 2
10	WINDOW FLT	9CDM029900 9CD1614100	ACRYL	1
11	KNOB EQ L	9CD1335300	ABS	1 1
12	KNOB EQ R	9CD1335400	ABS	1 1
13	BRKT SIDE	9CD2412900	ABS	2
14	PANEL FRONT	9CD0306000	MIPS	1
15	PLATE FLT	9CD0909800	PVC SHEET (T = 1.0)	2
16	BADGE DAEWOO	9CD1500900	ABS	1
17	PLATE FUNCTION	9CD0910000	PVC SHEET (T = 1.0)	1
18	DOOR CD	9CD1809300	MIPS	1
19	HEAT SINK	9CD4402800	BSP	1
20	CD MECHANISM	9CD6006900		1
21	COVER TOP	9CD0409600	MIPS	1
21-1	COVER TOP	9CD0409100	MIPS	-
22	DECO TOP	9CD1002200	ACRYL	-
23	WINDOW TOP	9CD1612900	PC SHEET	-
24 24-1	CASS DECK (A/S)	9CD6006800		11
<u>24-1</u> 25	CASS. DECK (A/R) PLATE SHIELD	9CD6007000 9CD0908500	ALP	-
26	KNOB FUNCTION	9CD1335100	ACRYL	1
27	PLATE FILTER	9CD0909900	PC SHEET (T=0.2)	
28	KNOB CD PLAY	9CD1335700	ABS	1
29	KNOB PLAY MODE	9CD1335800	ABS	1
30	KNOB CONTROL	9CD1335000	ABS	1
31	GUIDE LED	9CD2506000	HIPS	-
32	GUIDE FLT	9CD2505600	ABS	1
32-1	GUIDE FLT	9CD2505800	ABS	-
33	COVER SIDE L	9CD0409200	MIPS	1
34	COVER SIDE R	9CD0409300	MIPS	1
35	CHASSIS BOTTOM	9CD0607500	MIPS	1
35-1	CHASSIS BOTTOM	9CD0607100	SECC (T=1.0)	-
36	HEAT SINK1	9CD4404500	AL	1
36-1	HEAT SINKS	9CD4404600	AL	-
<u>36-2</u> 37	HEAT SINK5 BRKT HEAT TR	9CD4404700 9CD2413900	STS	- 1
38	RUBBER SILICON	9CD2413900 9CD4207900	RUBBER	1 1
39	COVER BACK	9CD4207900 9CD0409801	MIPS	1
S1	SCREW	7000407001	TT2 BIN 2.6X10	13
S2	SCREW		TT2 BIN 3X 10	35
S 3	SCREW WASHER		TT2 BIN 3X10	1
S 4	SCREW		TT2 BIN 3X12 BK	5
S 5	SCREW		TT2 BIN 4X6	8
S 6	SCREW		TT2 BIN 2X4	-
P1	PCB Ass'y		FRONT PCB	1
P1-1	PCB Ass'y		FRONT PCB	-
P1-2	PCB Ass'y		FRONT PCB	-
P2	PCB Ass'y		MAIN PCB	1
P2-1	PCB Ass'y		MAIN PCB	-
P2-2	PCB Ass'y		MAIN PCB	-
P3	PCB Ass'y		POWER PCB	1
P3-1 P3-2	PCB Ass'y PCB Ass'y		POWER PCB POWER PCB	-
P3-2 P4	PCB ASS y		PCB CD LED ASS'Y	-
1 7	II OD ASS Y		1 0 0 0 EED A33	

◆ AMI - 317L / 317R

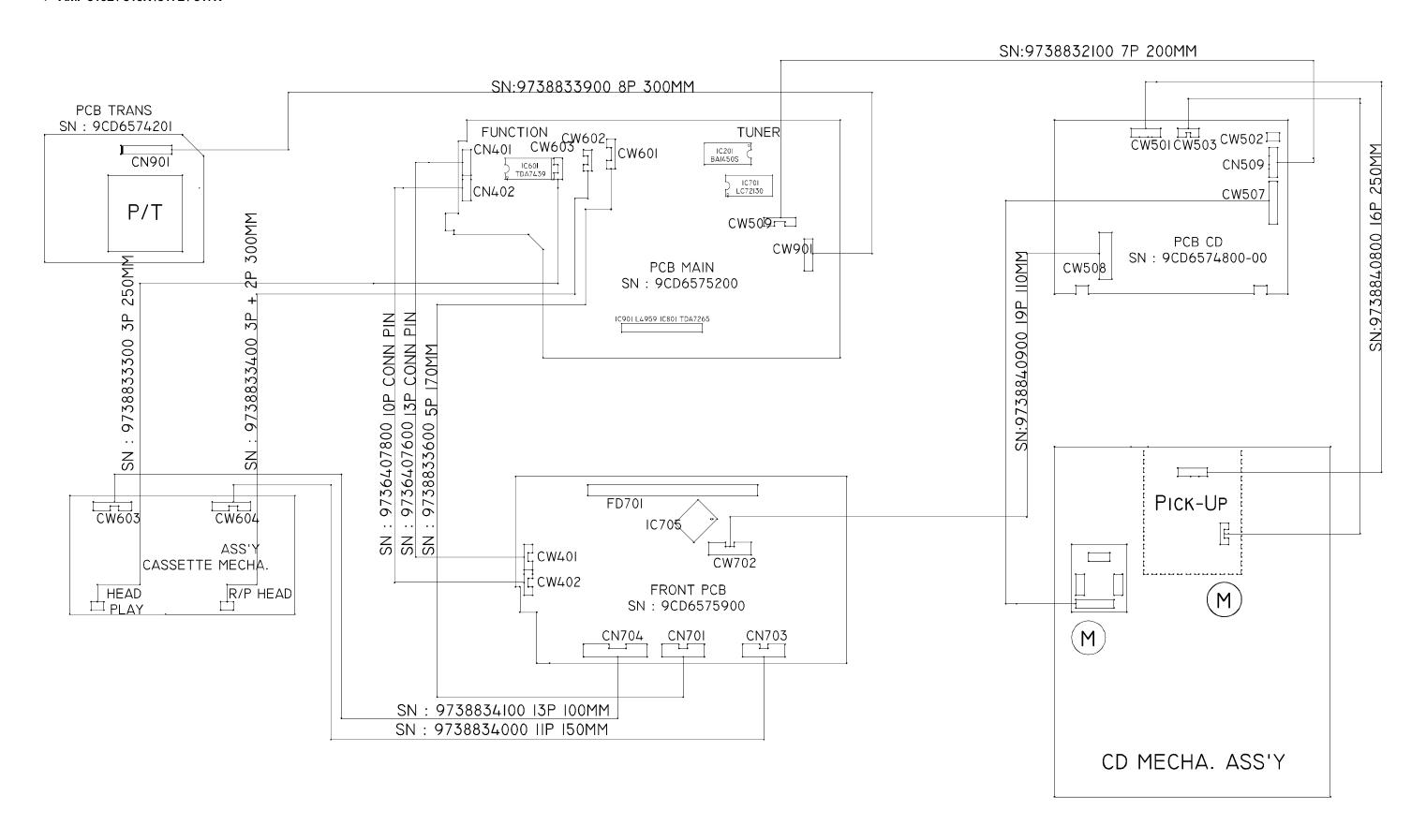


◆AMI-317L/317R PART LIST

No.	Parts Name	Parts Code	Description	Q'ty
4	WINDOW DOOR A/B	9CD1613900	ACRYL	1
1	WINDOW DOOR A/B	9CD1614000	ACRYL	1
2	COVER DOOR A/B	9CD0410200	MIPS	1
	COVER DOOR A/B	9CD0410300	MIPS	1
3	DOOR FRAME A/B	9CD1809400	ABS	1
3	DOOR FRAME A/B	9CD1809500	ABS	1
4	SPRING DOOR EJECT L	9CD30078L0	SUS D0.8	1
5	SPRING DOOR EJECT R	9CD30078R0	SUS DO.8	11
6	KNOB VOLUME	9CD1334400	ABS	1
7	KNOB EQ	9CD1334600	ABS	1
8	KNOB OPEN	9CD1335900	ABS	1
9	KNOB FUNCTION	9CD1334300	ACRYL CLEAR	4
10	KNOB MODE	9CD1334900	ABS	1
11	KNOB SUPER	9CD1334500	ABS	1 1
12 13	KNOB DISC	9CD1334200	ACRYL MILKY ABS	•
14	KNOB REC	9CD1334700	ACRYL	1 1
15	WINDOW FLT BRKT.SIDE	9CD1613700 9CD2412900	ABS 1.5GR	2
16	DECO VR	9CD2412900 9CD1002400	MIPS	<u>2</u> 1
17	COVER LED	9CD1002400 9CD0409700	MIPS WHITE	<u> </u>
18	WINDOW DECO	9CD1613800	ACRYL SMOG	<u>-</u> 1
	GUIDE FLT	9CD2505900	AMI-317L, AMI-717L	1
19	GUIDE FLT	9CD2505600	AMI-817L, AMI-917L	
20	PANEL FRONT	9CD0305900	MIPS	1
21	DAMPER ASSY	9CDM029800	ABS/ACETAL	2
22	LOCKER ASSY	9CDM029900	ABS/ACETAL	2
23	CASS.DECK(A/S)	9CD6007000	S/S ADR-2138MW	_
23	CASS.DECK(A/S)	9CD6006800	S/S ADR-2136SW	1
24	HOLDER PCB DECK	9CD2303600	MIPS 16.5GR(AMI-917L)	2
25	CD DECK MECHA.	9CD6006900	DCC-01B	1
26	HEAT SINK	9CD4402800	BSP 0.5T	11
27	DOOR CD	9CD1809300	MIPS	1
28	CHASSIS BOTTOM	9CD0607100	AMI-717L, AMI-817L, AMI-917L	-
	CHASSIS BOTTOM	9CD0607500	AMI-317L	1
	HEAT SINK 1	9CD4404500	AL	1
29	HEAT SINK 3	9CD4404600	AL AL	-
	HEAT SINK 5 HEAT SINK 7	9CD4404700 9CD4404300	AL	-
30	HEAT SINK P	9CD4404300 9CD4404200	AL T2.0	
31	CUSHION FOOT	9CD4207700	URETHAN FOAM RUBBER	2
31	COVER BACK	9CD0409801	MIPS	1
32	COVER BACK	9CD0409803	MIPS	<u> </u>
	COVER BACK	9CD0407804	MIPS	_
33	WINDOW TOP	9CD1612900	ACRYL SMOG	-
	COVER TOP	9CD0409600	MIPS	1
34	COVER TOP	9CD0409100	MIPS	
35	COVER SIDE L	9CD0409200	MIPS	1
36	COVER SIDE R	9CD0409300	MIPS	1
37	DECO TOP	9CD1002200	ACRYL CLEAR	-
38	BRKT.PCB A	9CD2413100	SECC 1.0T	
39	FILTER LED	9CD4700700	PC 0.15T	<u>-</u>
40	PLATE FLT	9CD0909800	PVC SHEET T1.0	2
41	PLATE FUNCTION	9CD0910000	PVC SHEET TO.5	1
42	BADGE DAEWOO	9CD1500900	ABS HOT STAMPING	1 1
43	BRKT.HEAT TR.	9CD2413900	SUS TO.4	1
44	HOLDER AC CORD	9CD2303300	ABS 4.0GR	-
P1	PCB MAIN	9CD6574900	AMI - 917L	<u> </u>
"	PCB MAIN	9CD6575200	AMI 717 9171	1
P 2	PCB MAIN PCB POWER	9CD6575300 9CD6575000	AMI-717,817L AMI-917L	<u>-</u>
<u> </u>	PCB FOWER PCB FRONT	9CD6575000 9CD6575100	AMI-917L	-
Р3	PCB FRONT	9CD6575100 9CD6575600	AMI-917L	-
' "	PCB FRONT	9CD6575900	AMI-317,717L	
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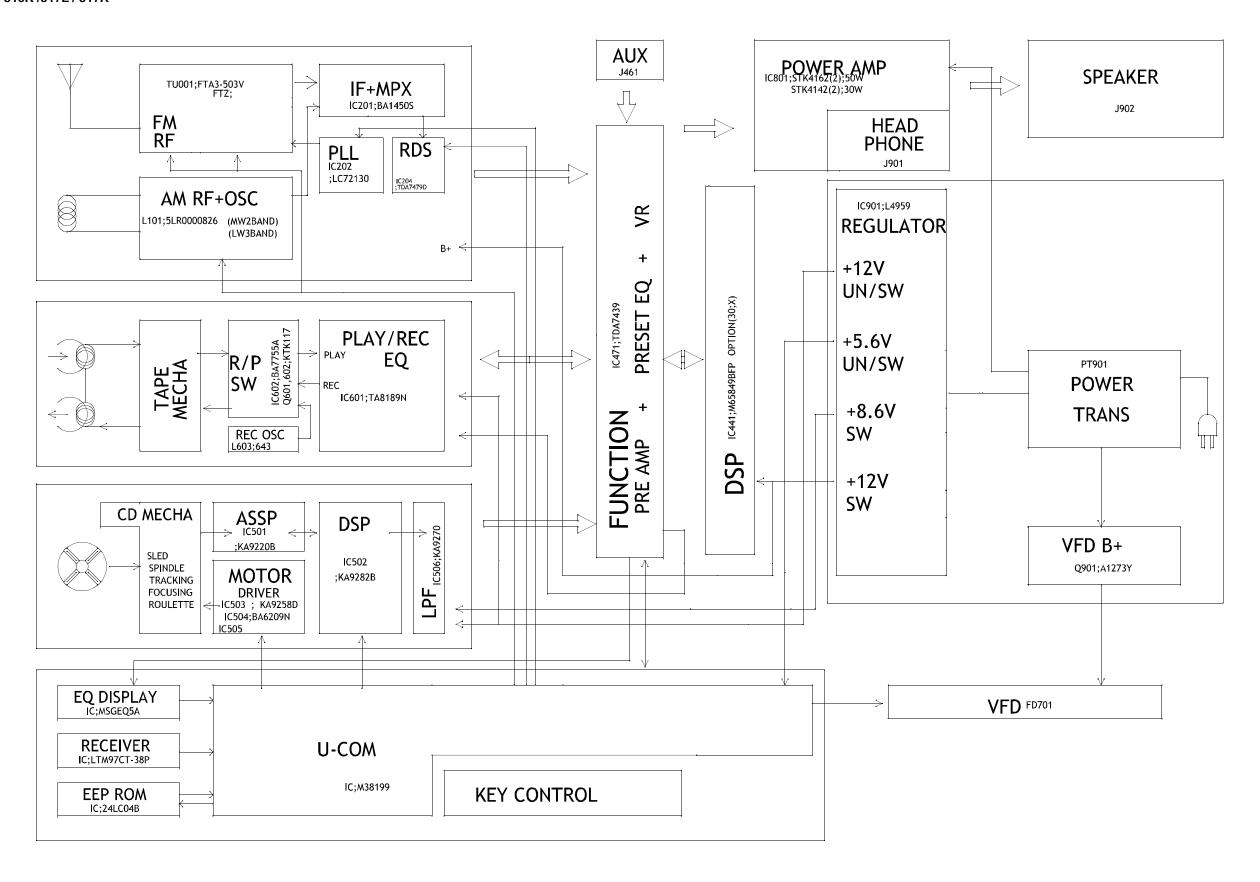
3. WIRING DIAGRAM

◆ AMI -316L / 316R /317L / 317R

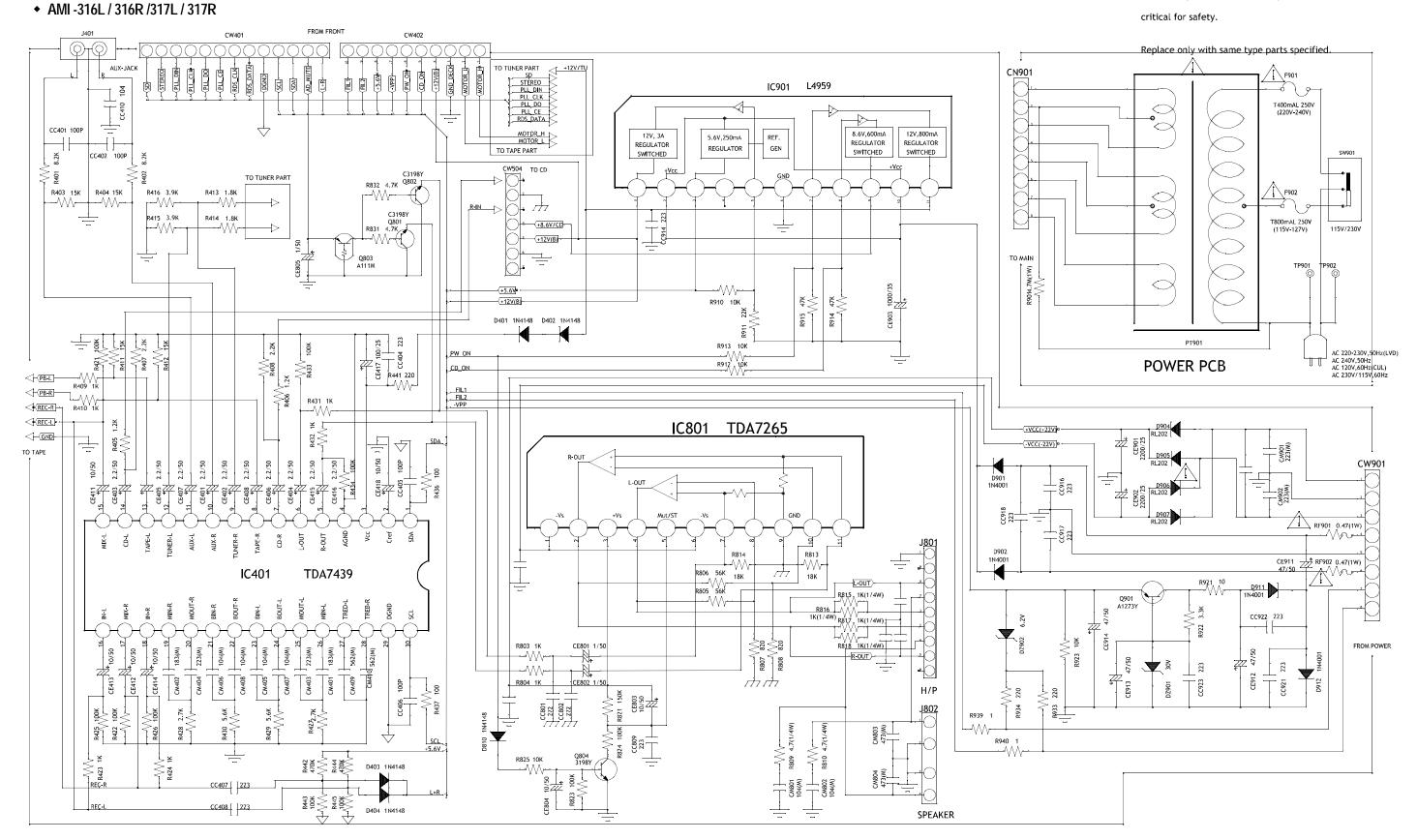


4. BLOCK DIAGRAM

◆ AMI -316L / 316R /317L / 317R

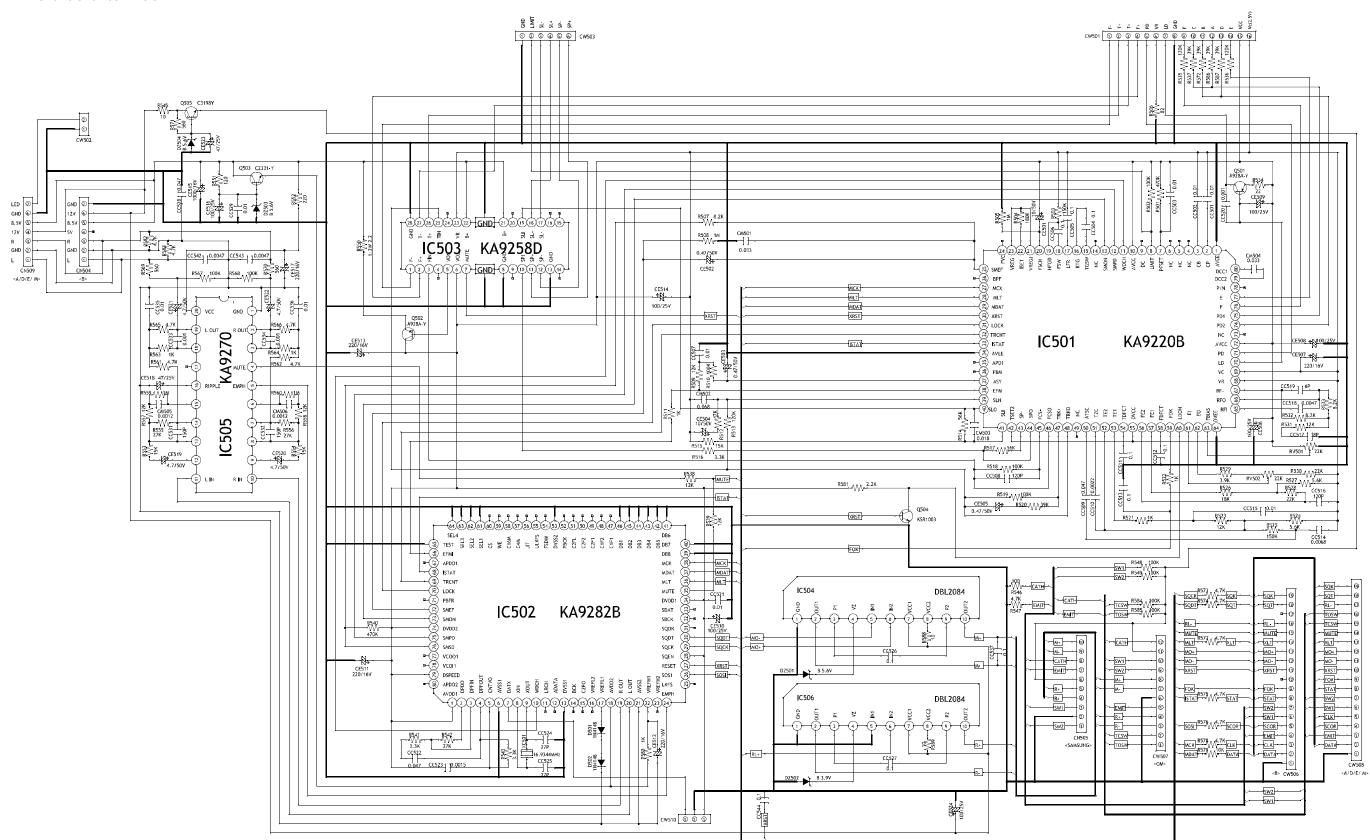


5. SCHEMATIC DIAGRAM



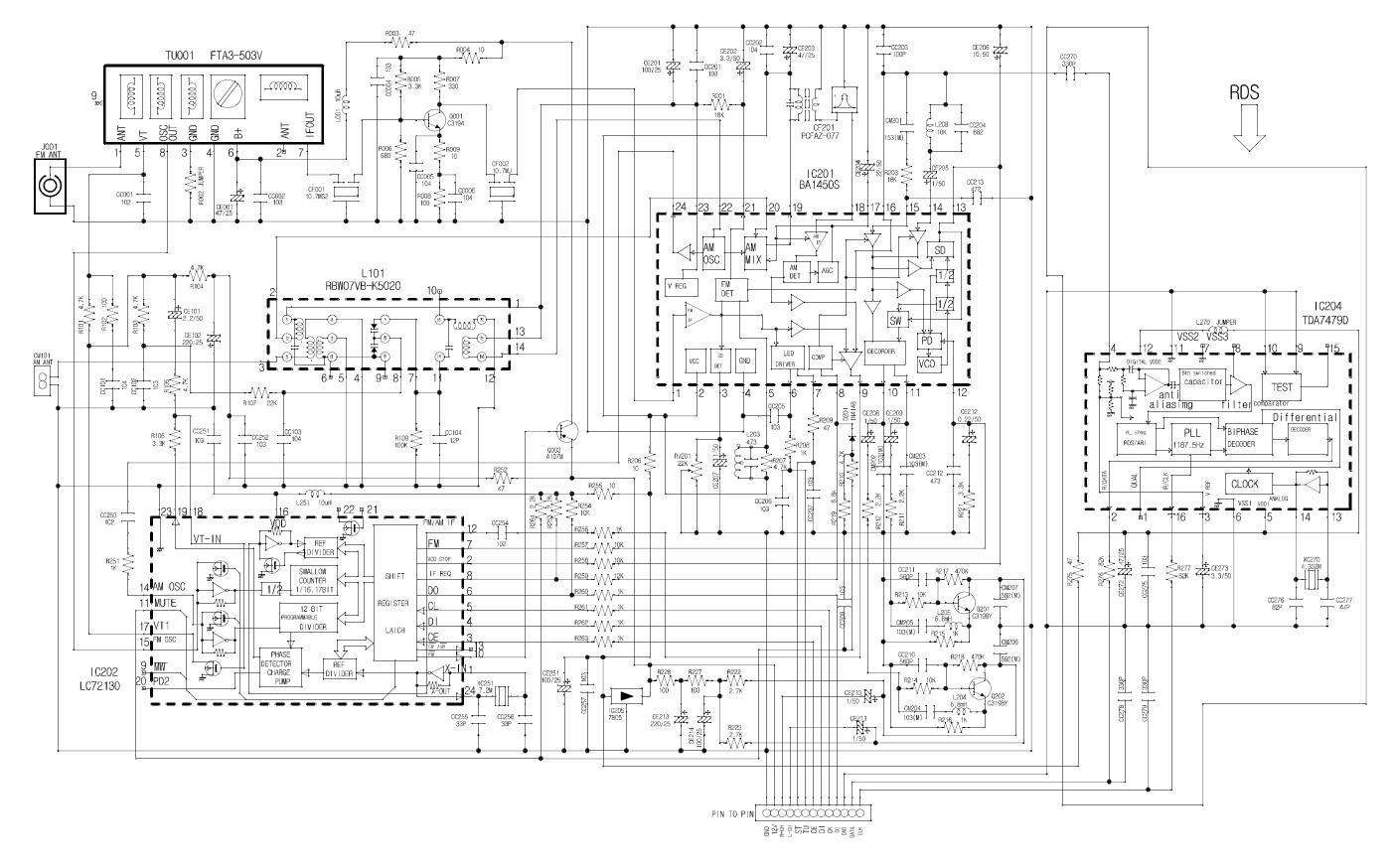
◆ CD

• AMI -316L / 316R /317L / 317R

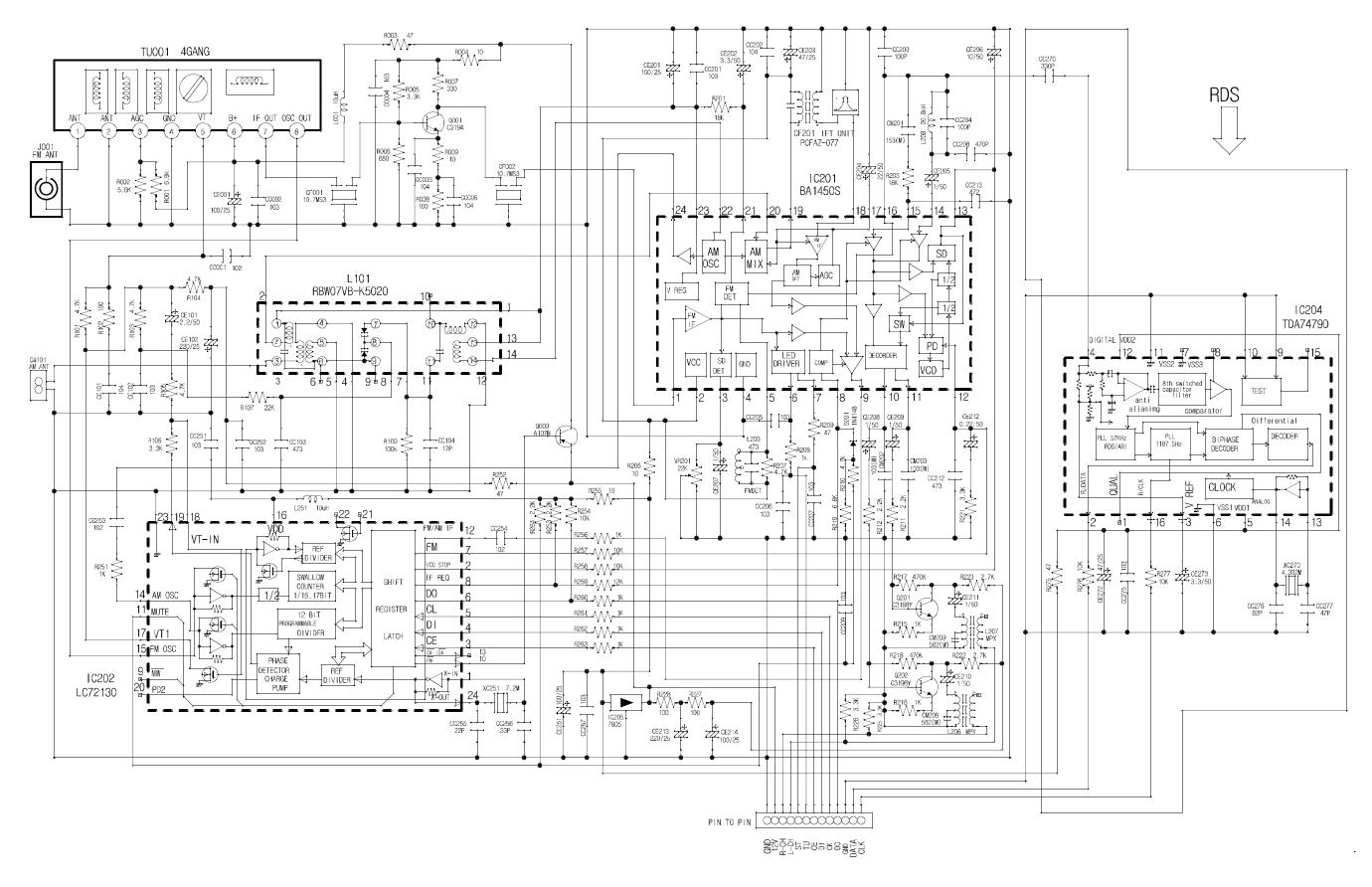


♦ TUNER

• AMI -316L / 316R /317L / 317R

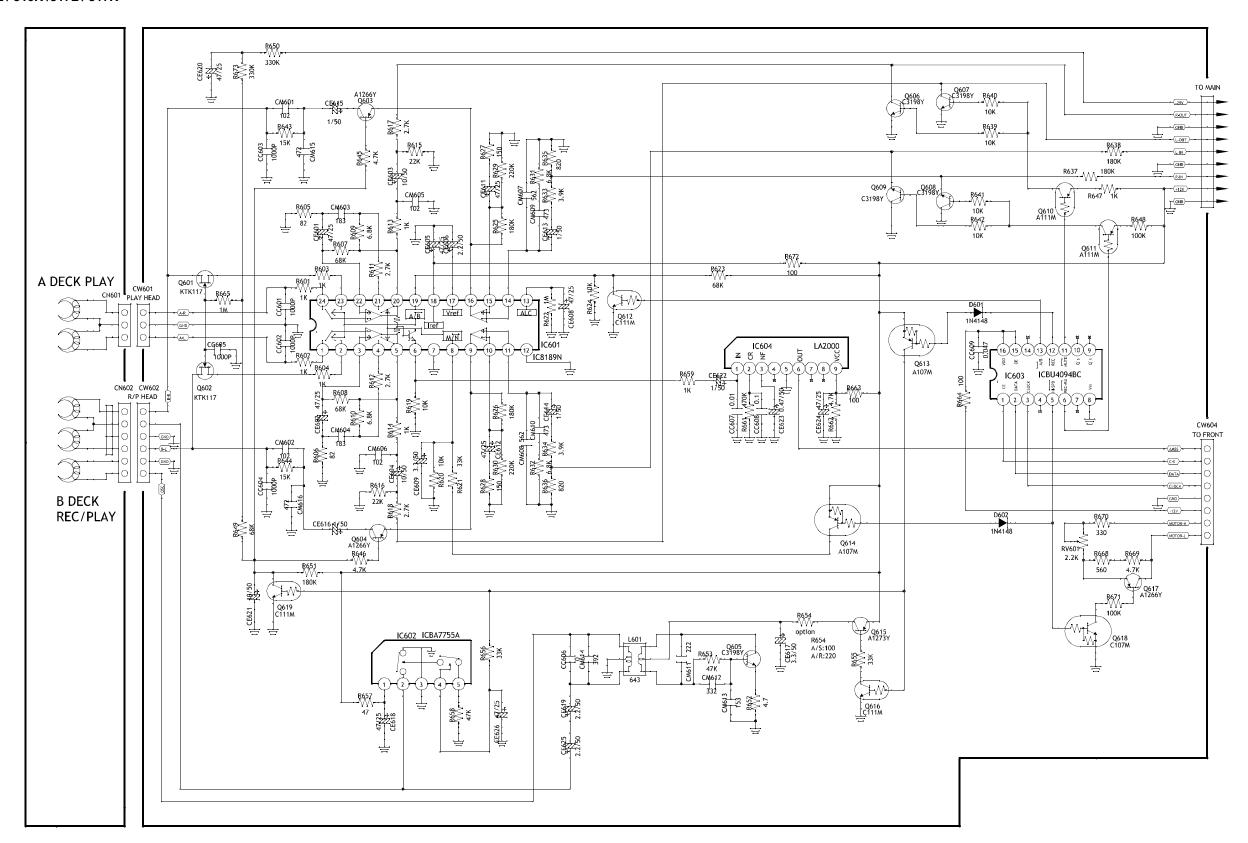


◆ TUNER-FTZ (OPTIONAL)



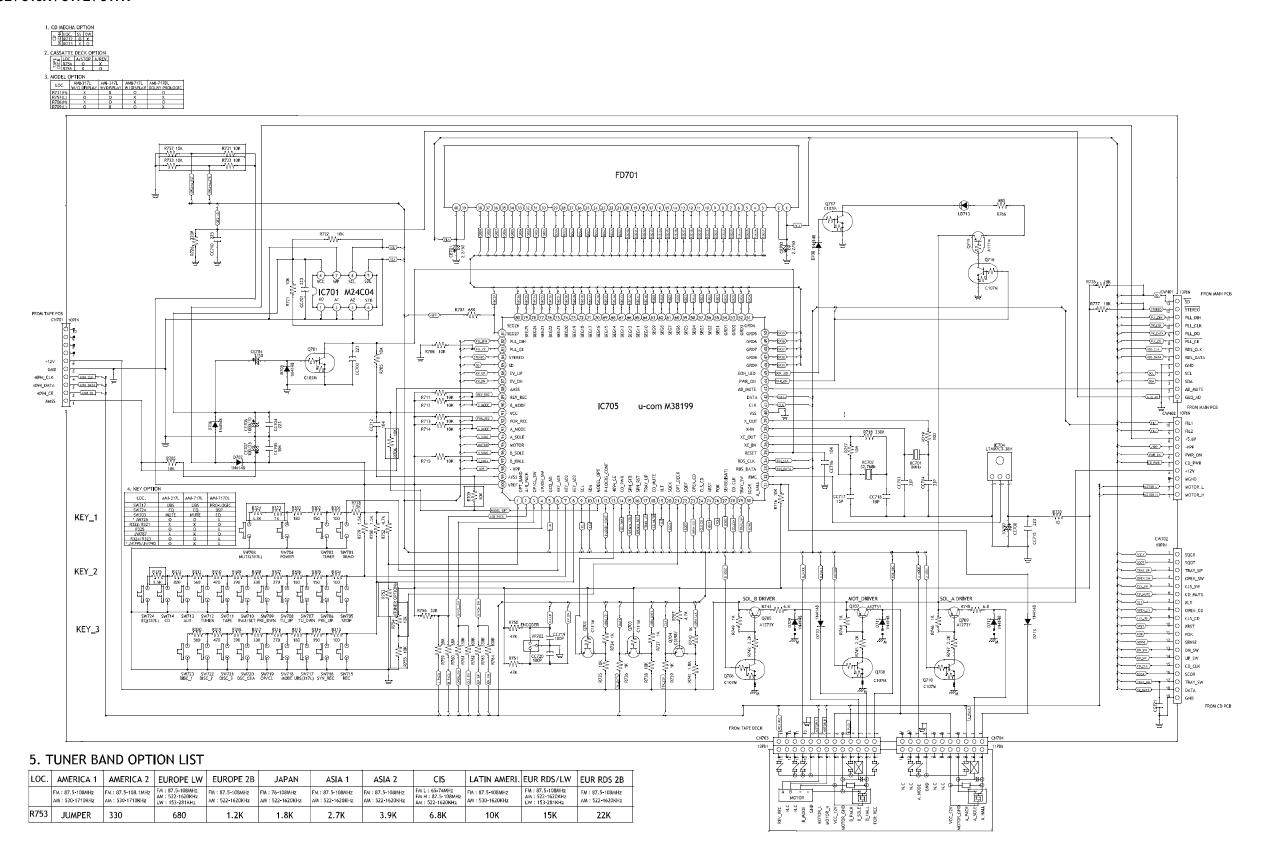
♦ TAPE

• AMI -316L / 316R /317L / 317R



♦ CONTROL

• AMI - 316L / 316R / 317L / 317R



6. PCB PATTERN LAYOUT

- ► POWER/AMP/TUNER/TAPE AMI-316L/316R/317L/317R

▶CD

• AMI-316L/316R/317L/317R

► CONTROL • AMI-316L/316R

• AMI-317L/317R

7. ELECTRICAL PARTS LIST

►AMI-316L/316/317L/317R

- IIVII-	WI-3 10L/3 10/3 17L/3 17R								
NO	Parts Name	Parts Code	Description	0471		ty	04.70	Location	
1	AM DE UNIT	EL D0000024	RBW07VB-K5020		317R	316L			
	AM RF UNIT ANT AM LOOP	5LR0000828 5LA180K828		1	1	1		L101 AT101	
	ANTENNA FM	9736806000		1	1	1		AT102	
	C CERA		50V B 100PF K (TAPPING)	1	1	1		CC203	
5	C CERA		50V B 1000PF K (TAPPING)	3	3	3		CC001 CC253 CC254	
6	C CERA	CCXB1H272K	50V B 2700PF K (TAPPING)	2	2	2	2	CC801 CC802	
	C CERA		50V B 330PF K (TAPPING)	-	1	-		CC270	
	C CERA		50V B 4700PF K (TAPPING)	1	1	1		CC213	
	C CERA		50V B 560PF K (TAPPING)	2	2	2		CC210 CC211	
	C CERA		50V B 6800PF K (TAPPING)	1	1	1		CC204	
	C CERA	CCXB1H821K	50V B 820PF K (TAPPING)	4	4	4	4	CC601 CC602 CC603 CC604	
12	C CERA	CCXF1H103Z	50V F 0.01MF Z (TAPPING)	21	22	21	22	CC002 CC004 CC102 CC201 CC205 CC206 CC207 CC209 CC251 CC252 CC257 [CC275] CC501 CC502 CC501 CC507 CC515 CC521 CC529 CC535 CC536 CC607	
13	C CERA	CCXF1H104Z	50V F 0.1MF Z	21	21	25	25	CC005 CC006 CC101 CC103 CC202 CC215 CC410 CC504 CC505 CC506 CC511 CC512 CC513 CC526 CC527 CC537 CC544 CC608 [CC703] CC705 [CC706 CC710 CC722 CC723 CC725 [CC712 CC716]	
	C CERA		50V F 0.022MF Z (TAPPING)	15	15	14	14	CC403 CC407 CC408 CC701 [CC70 CC704 CC710 CC715 CC809 CC916 CC917 CC918 CC921 CC922 CC923	
_	C CERA		50V F 0.047MF Z (TAPPING)	5	5	5	5	CC212 CC509 CC522 CC528 CC609	
	C CERA		25V B 1000PF K (AXIAL)	3	3	3		CC520 CC533 CC534	
	C CERA C CERA		25V B 150PF K (AXIAL)	2 1	2	2 1		CC531 CC532 CC523	
	C CERA		25V B 1500PF K (AXIAL) 25V B 2200PF K (AXIAL)	2	2	2		CC523 CC510 CC516	
	C CERA		25V B 2200FF K (AXIAL)	1	1	1		CC508	
	C CERA		25V B 4700PF K (AXIAL)	3	3	3		CC518 CC542 CC543	
	C CERA		25V B 6800PF K (AXIAL)	1	1	1	1	CC514	
	C CERA		50V CH 100PF J (TAPPING)	6	6	6	6	CC401 CC402 CC405 CC406 CC719 CC720	
24	C CERA	CXCH1H120J	50V CH 12PF J (TAPPING)	1	1	1	1	CC104	
25	C CERA		50V CH 15PF J (TAPPING)	1	1	1	1	CC717 [C711]	
26	C CERA	CXCH1H180J	50V CH 18PF J (TAPPING)	1	1	1	1	CC718 [C712]	
27	C CERA	CXCH1H330J	50V CH 33PF J (TAPPING)	4	4	4	4	CC255 CC256 CC713 CC714	
	C CERA		50V CH 330PF J (TAPPING)	1	1	1		CC606	
	C CERA		50V CH 47PF J (TAPPING)	-	1	-		CC277	
	C CERA		50V CH 82PF J (TAPPING) CH 25V 6PF K AXIAL	-	1	-		CC276	
	C CERA C CERA		CH 25V 8PF K AXIAL	1	1	1		CC519 CC517	
	C CERA		CH 50V 27PF J AXL 52MM	2	2	2		CC524 CC525	
	C ELECTRO		10V RS 1000MF 13X20	-	-	1		CE704	
	C ELECTRO		16V RS 1000MF 13X20	1	1	1		CE515	
	C ELECTRO		50V RS 10MF (5X11) TP	3	3	3		CE603 CE604 CE621	
	C ELECTRO		50V RS 1MF (5X11) TP	5	5	5		CE613 CE614 CE615 CE616 CE622	
38	C ELECTRO	CEXE1H229A	50V RS 2.2MF (5X11) TP	2	2	2	2	CE606 CE619	
39	C ELECTRO	CEXE1H339A	50V RS 3.3MF (5X11) TP	2	2	2	2	CE609 CE617	
	C ELECTRO		50V RS 0.47MF (5X11) TP	1	1	1		CE623	
	C ELECTRO		10V RSS 1000MF (10X16) TP	1	1	-		CE706	
	C ELECTRO C ELECTRO		16V RSS 220MF (8X11.5) TP 25V RSS 100MF (6.3X11) TP	5 9	5 9	5 9	5 9	CE507 CE511 CE512 CE513 CE517 CE417 CE506 CE508 CE509 CE510	
14	C ELECTRO	CEVE1E222V	25V RSS 2200MF (16X25) TP	2	2	2	2	CE514 CE516 CE524 CE707 CE901 CE902	
	C ELECTRO		25V RSS 47MF (5X11) TP	19	20	19	20	CE901 CE902 CE001 CE102 CE201 CE203 CE213 CE214 CE251 [CE272] CE518 CE523 CE601 CE602 CE605 CE607 CE608 CE611 CE612 CE618 CE620 CE624	
46	C ELECTRO	CEXF1H100V	50V RSS 10MF (5X11) TP	11	11	11	11	CE206 CE411 CE412 CE413 CE414 CE418 CE501 CE504 CE708 CE803 CE804	
	C ELECTRO		50V RSS 1MF (5X11) TP	10	10	10	10	CE205 CE207 CE208 CE209 CE210 CE211 CE704 CE801 CE802 CE805	
	C ELECTRO		50V RSS 22MF (5X11) TP	1	1	1		CE204	
	C ELECTRO		50V RSS 0.22MF (5X11) TP 50V RSS 2.2MF (5X11) TP	14	14	14	14	CE212 CE101 CE401 CE402 CE403 CE404 CE405 CE406 CE407 CE408 CE415 CE416 CE610 [CE701 CE702] [CE706 CE707]	
	C ELECTRO		50V RSS 3.3MF (5X11) TP	1	2	1		CE202 [CE273]	
	C ELECTRO		50V RSS 47MF (6.3X11) TP	4	4	4		CE911 CE912 CE913 CE914	
	C ELECTRO		50V RSS 0.47MF (5X11) TP	3	3	3		CE502 CE503 CE505	
	C ELECTRO		50V RSS 4.7MF (5X11) TP	4	4	4		CE519 CE520 CE521 CE522	
55	C ELECTRO	CEXF1V102V	35V RSS 1000MF (13X25) TP	1	1	1	1	CE903	

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NO	Parts Name	Parts Code	Description	317L		ι <u>γ</u> 316L	317R	Location
56	C MYLAR	CMXM1H102J	50V 0.001MF J (TP)	4	4	4	4	CM601 CM602 CM605 CM606
	C MYLAR		50V 0.01MF J (TP)	4	4	4	4	CM202 CM203 CM204 CM205
58	C MYLAR	CMXM1H104J	50V 0.1MF J	6	6	6	6	CM405 CM406 CM407 CM408 CM80 CM802
	C MYLAR		50V 0.0012MF J	2	2	2	2	CM505 CM506
	C MYLAR	CMXM1H152J		2	2	2	2	CM615 CM616
	C MYLAR C MYLAR		50V 0.015MF J (TP) 50V 0.018MF J	2 5	2 5	<u>2</u> 5	2 5	CM201 CM613 CM401 CM402 CM503 CM603 CM604
	C MYLAR	CMXM1H183J		1	1	1	1	CM611
	C MYLAR		50V 0.022MF J	4	4	4	4	CM403 CM404 CM901 CM902
	C MYLAR		50V 3300 PF J	1	1	1	1	CM612
66	C MYLAR	CMXM1H333J	50V 0.033MF J (TP)	2	2	2	2	CM501 CM504
	C MYLAR		50V 0.0039MF J	1	1	1	1	CM614
	C MYLAR C MYLAR		50V 0.047MF J 50V 5600 PF J	6	2 6	2 6	6	CM609 CM610 CM206 CM207 CM409 CM410 CM60
	C MYLAR		50V 0.068 MF J	1	1	1	1	CM608 CM502
	CLIP FUSE		FC-5N	2	2	2	2	FC901 FC902
	COIL BIAS OSC		SM-10F 5.04MH	1	1	1	1	L601
73	COIL CHOKE	5LC682K822	6.8MH	2	2	2	2	L204 L205
	COIL DESCRIMINATOR		7X7 BLK KSZ-73S	1	1	1	1	L203
	COIL PEAKING		10UH K (AXIAL 3.5MM)	2	2	2	2	L001 L251
	CONN AS		PIN BASE 53095-1310 13P	2	2	2	2	CN401 CW401
	CONN AS CONN AS		7P 200 P=2.5 BOARDIN UL2851 #28 3P SHIELD 250M	1	1	1	1	CN509 CW509 CN603 CW603
	CONN AS		#28 3P+2P SHIELD 300MM	1	1	1	1	CN602 CW602
	CONN AS		#26 5P FLAT 170MM	2	2	2	2	CN601 CN701 CW601
	CONN AS		#26 8P BOARD-IN 300MM	1	1	1	1	CN901
82	CONN AS	9738833900	#22 8P BOARD-IN 300MM	1	1	1	1	CN901 CW901
	CONN AS		#26 2.0PITCH 11P FLAT 150	1	1	1	1	CN704
	CONN AS		#26 13P FLAT 100MM	1	1	1	1	CN703
	CONN AS		FFC 16P P1.0X250MM R	1	1	1	1	CN501 CN508
	CONN AS CONN PIN		FFC 19P P1.25X110MM K 53095-1010 10PIN ANGLE	2	2	1 2	2	CN402 CW402
	CONN WAFER		52084-1010 10P BOTTOM	1	1	1	1	CW402
	CONN WAFER		52492-1920 19P BOTTOM	1	1	1	1	CW702
90	CONN WAFER	9736408400	52045-1945 19P	1	1	1	1	CW508
	CONN WAFER		2P S2B-XH-A	1	1	1	1	CW101
	CONN WAFER		52807-1610	1	1	1	1	CW501
	CONN WAFER CONN WAFER	9CD6259500	2001-WS-12P	1	1	1	1	CW507 CW503
	CONN WAFER	9CD6259600		1	1	1	1	CW503
	CORD AC		KKP419C,KLCE-2F,0.75SQUR		1	1	1	CD901
	CRYSTAL QUARTZ		DT-38 32.768KHZ 20PPM	1	1	1	1	XC702
	DIODE	D1N4001-	1N4001	4	4	4	4	D901 D902 D911 D912
99	DIODE	DRL202	RL202	4	4	4	4	D904 D905 D906 D907
100	DIODE		1N4148 AUTO 52MM	18	19	19	20	D201 D401 D402 D403 D404 D501 D502 D601 D602 [D703] [D705]D704 D706 D707 D708 D709 D710 D711 D712 [D713] D801
	DIODE ZENER		MTZ30B	1	1	1	1	DZ901
	DIODE ZENER		MTZ3.9B	1	1	1	1	DZ502
	DIODE ZENER DIODE ZENER	DZTZ5R6B DZTZ6R2B		3 1	3 1	3 1	3 1	DZ501 DZ503 DZ504 DZ902
	FET	TKTK117Y		2	2	2	2	Q601 Q602
	FILTER	5PPCFAZ077		1	1	1	1	CF201
	FILTER CERA		SFE 10.7MHZ RED	1	1	1	1	CF002
	FILTER CERA		SFE107MS2-A	1	1	1	1	CF001
	FUSE GLASS TUBE		SEMKO TL 400MA 250V MF51	1	1	1	1	F901
110		1BA1450S		1	1	1	1	IC201
111 112			BU4094BCF(SOP16) DBL2084(D/W)	1 2	2	1 2	2	IC603 IC504 IC506
113			L4959	1	1	1	1	IC901
114		1LC72130		1	1	1	1	IC202
115			M24C04-BN6	1	1	1	_	IC701
116			U-COM M38199	1	1	1	1	IC705
117		1TA8189N		11	1	1	1	IC601
118			TDA7265	1	1	1	1	IC801
119	IC AMSS		TDA7479D LA2000	- 1	1	- 1	1	IC204 IC604
	IC AMSS		KA9270	1	1	1	1	IC505
	IC AUDIO	1TDA7439		1	1	1	1	IC401
	IC AUDIO DSP	1KA9282B		1	1	1	1	IC502
	IC CHIP	1KA9258D		1	1	1	1	IC503
	IC CHIP RF	1KA9220B		1	1	1	1	IC501
	IC PRE AMP	1TM97CT38P		1	1	1	1	IC704
127	IC REGULATOR	1K1A78L05-	KIA78L05BP	1	1	1	1	IC205

NO	Parts Name	Parts Code	Description		Q'	'ty		Location
NO	raits Name	Parts Code	Description	317L	317R	316L	317R	Location
	IC SWITCHING		BA7755A (HEAD SW)	1	1	1	1	IC602
	JACK ANTENNA	9736322200	T-646	1	1	1	1	J001
	JACK HEADPHONE JACK RCA		HTJ-064-05B GOLD S-436P	1	1	1	1	J801 J401
	JACK SPEAKER		CJ-9007-040	1	1	1	1	J802
133		DLTL307EE-	LTL-307EE(RED)PI5	-	1	-	1	LD713
134	PIN WAFER	9736407700	52084-1310 13P BOTTOM	1	1	1	1	CW401
135	PIN WRAPPING	9713550400	1.0X2.5X15	6	6	6	6	TP501 TP502 TP503 TP504 TP901 TP902
	R CARBON FILM	RD-2Y229J-	1/2 2.2 OHM J	1	1	1	1	R550
	R CARBON FILM	RD-4Z100J-	1/4 10 OHM J	2	2	2		R588 R589
	R CARBON FILM	RD-4Z102J-	1/4 1K OHM J	4	4	4	4	R815 R816 R817 R818
139	R CARBON FILM	RD-4Z479J-	1/4 4.7 OHM J	2	2	2	2	R809 R810 R004 R009 R206 R255 R545
140	R CARBON FILM	RD-AZ100J-	1/6 10 OHM J	7	7	7	7	R720 R921
141	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	15	15	15	15	R008 R102 R227 R228 R301 R304 R313 R436 R437 R546 R654 R663 R664 R672 R719
142	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	41	41	41	41	R208 R215 R216 R251 R256 R260 R261 R262 R263 R323 R409 R410 R423 R424 R431 R432 R511 R521 R522 R563 R564 R580 R601 R602 R603 R604 R613 R614 R647 R648 R659 R734 R736 R737 R739 R740 R744 R746 R74
143	R CARBON FILM	RD-AZ103J-	1/6 10K OHM J	38	40	36	38	L208 R213 R214 R254 R257 R258 [R276 R277] R579 R619 R620 R624 R639 R640 R641 R642 [R701 R702 R704 R707] [R705 R708] R709 R711 [R712] [R713]R714 R715 R716 R721 R722 [R727 R730] R733 R735 R738 [R747] R754 R757 R7
144	R CARBON FILM	RD-AZ104J-	1/6 100K OHM J	26	26	26	26	R109 R421 R422 R425 R426 R433 R434 R439 R440 R443 R445 R502 R510 R518 R519 R548 R549 R567 R568 R584 R585 R671 R762 R764 R823 R824
145	R CARBON FILM	RD-AZ105J-	1/6 1M OHM J	6	6	6	6	R505 R508 R559 R560 R622 R665
	R CARBON FILM	RD-AZ106J-	1/6 10M OHM J	1	1	1	1	R717[R759]
_	R CARBON FILM	RD-AZ109J-	1/6 1 OHM J	2	2	2	2	R939 R940
	R CARBON FILM	RD-AZ121J-	1/6 120 OHM J	1	1	1	1	R551
149	R CARBON FILM	RD-AZ122J-	1/6 1.2K OHM J	2	2	2	2	R405 R406
150	R CARBON FILM	RD-AZ123J-	1/6 12K OHM J	10	10	10	10	R259 R509 R523 R531 R532 R533 R538 R539 R557 R558
	R CARBON FILM		1/6 120K OHM J	1	1	1	1	R513
	R CARBON FILM		1/6 150 OHM J	5	5	5		R302 R305 R314 R627 R628
	R CARBON FILM		1/6 1.5K OHM J 1/6 15K OHM J	10	10	11	11	R325 R778 R779 R780 [R371] R403 R404 R411 R412 R515 R553 R554 R643 R644
155	R CARBON FILM	RD-AZ154J-	1/6 150K OHM J	3	3	3	3	R822 R503 R525 R821
	R CARBON FILM		1/6 180 OHM J	3	3	2	3	R303 R306 R315 [R353
157	R CARBON FILM		1/6 1.8K OHM J	3	3	3	3	R362 R780] R413 R414 [R741 R733]
	R CARBON FILM		1/6 1.8K OHM J	5	5	5	5	R201 R203 R526 R813 R814
	R CARBON FILM		1/6 180K OHM J	6	6	6	6	R504 R625 R626 R637 R638 R651
160	R CARBON FILM	RD-AZ220J-	1/6 22 OHM J	1	1	1		R534
	R CARBON FILM	RD-AZ221J-	1/6 220 OHM J	4	4	4	4	R441 R552 R933 R934
162	R CARBON FILM	RD-AZ222J-	1/6 2.2K OHM J	10	10	10	10	R211 R212 R253 R264 R407 R408 [R737 R740] R581 R742 F R747
163	R CARBON FILM	RD-AZ223J-	1/6 22K OHM J	7	7	7	7	R107 R528 R530 R615 R616 [R724] R753 R911
	R CARBON FILM			3	3	3	3	R629 R630 R726
165	R CARBON FILM	RD-AZ271J-	1/6 270 OHM J	2	2	2	2	R307 R316 [R354 R363]
	R CARBON FILM		1/6 2.7K OHM J	8	8	8	8	R222 R223 R427 R428 R611 R612 R617 R618
	R CARBON FILM	RD-AZ273J-	1/6 27K OHM J	3	3	3	3	R542 R555 R556 R007 [R308 R317] [R355
168	R CARBON FILM	RD-AZ331J-	1/6 330 OHM J	4	4	4	4	R364] R670

NO	Parts Name	Parts Code	Description		Q'	'ty		Location
NO	raits Name	raits code	Description	317L	317R	316L	317R	
	R CARBON FILM		1/6 3.3K OHM J	8	8	7	7	R005 R106 R221 [R324] R516 R541 R543 R922
170	R CARBON FILM	RD-AZ333J-	1/6 33K OHM J	4	4	4	4	R621 R655 R656 R756 [R716] R650 R673 [R718 R761] R763
171	R CARBON FILM	RD-AZ334J-	1/6 330K OHM J	5	5	5	5	[R760 R776 R779]
172	R CARBON FILM	RD-AZ391J-	1/6 390 OHM J	3	3	2	2	R309 R318 R767 [R356 R365]
173	R CARBON FILM	RD-AZ392J-	1/6 3.9K OHM J	5	5	6	6	[R373] R415 R416 R529 R633 R634
174	R CARBON FILM	RD-AZ393J-	1/6 39K OHM J	6	6	6	6	R520 R537 R572 R586 R587 R759 [R718]
	R CARBON FILM		1/6 47 OHM J	4	5	4	5	R003 R209 R252 [R275] R657
176	R CARBON FILM	RD-AZ471J-	1/6 470 OHM J	2	2	2	2	R310 R319 [R357 R366]
177	R CARBON FILM	RD-AZ472J-	1/6 4.7K OHM J	27	27	28	28	R101 R103 R104 R105 R207 R210 R547 R561 R562 R565 R566 R573 R574 R575 R576 R577 R578 R582 R583 R645 R646 R662 R669 [R722 R723] R752 R787 [R788] R831 R832
178	R CARBON FILM	RD-AZ473J-	1/6 47K OHM J	7	7	9	10	R512 R653 R658 R745 R746 [R750][R751] [R765 R772] [R781] R914 R915
	R CARBON FILM		1/6 470K OHM J	7	7	7	7	R217 R218 R442 R444 R501 R540 R661
	R CARBON FILM R CARBON FILM		1/6 4.7M OHM J 1/6 4.7 OHM J	1	1	1	1	R901 R652 [R652]
	R CARBON FILM		1/6 560 OHM J	6	6	6	6	R311 R320 R569 R570 R571 R668
183	R CARBON FILM	RD-AZ562J-	1/6 5.6K OHM J	3	3	3	3	R429 R430 R527
	R CARBON FILM		1/6 56K OHM J	4	4	4	4	R514 R517 R805 R806
	R CARBON FILM		1/6 680 OHM J	2	2	1	1	R006 [R766]
186	R CARBON FILM	RD-AZ682J-	1/6 6.8K OHM J	5	5	5	5	R219 R609 R610 R631 R632 R607 R608 R623 R649 [R707
	R CARBON FILM		1/6 68K OHM J	6	6	6	6	R760 R717 R784]
	R CARBON FILM R CARBON FILM		1/6 6.8 OHM J 1/6 82 OHM J	3	3	3	3	R743 R748 [R739 R744] R506 R605 R606
	R CARBON FILM		1/6 820 OHM J	5	5	6	6	R312 R635 R636 R807 R808 [R359 R368]
191	R CARBON FILM	RD-AZ822J-	1/6 8.2K OHM J	4	4	4	4	R401 R402 R507 R524
	R CARBON FILM		1/6 82K OHM J	2	2	2	2	R535 R536
	R FUSIBLE		0.470HM 1W	2	2	2	2	RF901 RF902
	R SEMI FIXED R SEMI FIXED		1/10 2.2K OHM B V6EK-PV1S VM6CK-PV(1S) B 22K OHM	3	3	3	3	RV601 RV201 RV501 RV502
	RESONATOR		CSA8MTZ, 8MHZ	1	1	1	1	XC701
197	RESONATOR CERA	5PCSA16R93	CSA16.93MXZ04	1	1	1	1	XC501
198	SW ENCORDER	5SH162401-	EC16B24204 24P W/DETENT	1	1	1	1	VR702 [VR701]
	SW TACT		KPT-1105A 1C-1P	24	24	25	25	\$\text{SW701} \text{SW702} \text{SW703} \text{SW704} \text{SW705} \text{SW707} \text{SW708} \text{SW709} \text{SW705} \text{SW701} \text{SW716} \text{SW712} \text{SW718} \text{SW714} \text{SW717} \text{SW718} \text{SW719} \text{SW724} \text{SW724} \text{SW724} \text{SW724} \text{SW724}
200			KRA107M (KSR2006)	1	1	1	1	Q003
201			KRA111-M TAPPING(KSR2010) KRC107-M TAPPING(KSR1006)	4	1 5	4	4	Q715 Q701 [Q706] Q708 Q710 [Q717]
203	TR	TKRC111M	KRC111M (KSR1010)	2	3	2	2	Q702 Q703 [Q716]
204			KSA928A-Y	2	2	2	2	Q501 Q502
205 206			KSC2331Y KSR1003	1	1	1	1	Q503 Q504
207			KRA107M (KSR2006)	2	2	2	2	Q613 Q614
208	TR	TZRA111M	KRA111M	3	3	3	3	Q610 Q611 Q803
209			KRC107M(AUTO)	1	1	1	1	Q618
210 211			KRC111M KTA1266Y- (AUTO)(1015Y)	3	3	3	3	Q612 Q616 Q619 Q603 Q604 Q617
212			KTA1273Y(966Y)	5	5	5	5	Q615 Q705 Q707 Q709 Q901
213			KTC3194Y	1	1	1	1	Q001
214	TR	TZTC3198Y-	KTC3198Y-(1815Y) (AUTO)	12	12	12	12	Q201 Q202 Q505 Q605 Q606 Q607 Q608 Q609 Q704 Q801 Q802 Q804
	TRANS POWER	5TP8066762		1	1	1	1	PT901
	TUNER PACK	9737612700		1	1	1	1	TU001
217 218	VFD WIRE JUMPER	DSVA09MM10 W581GY1005	SVA09MM10 AWG22 1/0.65 SN 10 AUTO	1 2	1 2	2	2	FD701 R827 R829
	WIRE JUMPER		AWG22 1/0.65 SN 5 AUTO	1	1	-	-	CC709
	WIRE JUMPER		AWG22 1/0.65 SN 6 AUTO	1	2	1	2	[L270] R002
	WIRE JUMPER		AWG22 1/0.65 SN 7.5 AUTO	1	1	-	- 1	R703 XC270
	X-TAL X-TAL	5XA4R332M- 5XA7R20000		1	1	1		XC270 XC251
	A 1716	3AA7 R20000						